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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/785,326	02/24/2004	Fredric J. Cohen	X-11057C	9685

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ELI LILLY AND COMPANY  
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EXAMINER

DELACROIX MUIRHEI, CYBILLE

ART UNIT	PAPER NUMBER
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1614

DATE MAILED: 07/28/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/785,326

Applicant(s)

COHEN ET AL.

Examiner

Cybille Delacroix-Muirheid

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 March 2005 and 09 May 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 19 and 145-152 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 19 and 145-152 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 24 February 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 03/25/05
- ☐ Interview Summary (PTO-413).  
Paper No(s)/Mail Date. \_\_\_\_\_
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: \_\_\_\_\_

***Detailed Action***

The following is responsive to applicant's amendment and terminal disclaimer received March 25, 2005 and May 9, 2005.

Claims 1-18, 20-144 are cancelled. New claims 145-152 are added. Claims 19, 145-152 are currently pending.

Applicant's information disclosure statement received March 25, 2005 has been considered. Please refer to applicant's copy of the 1449 submitted herewith.

The previous claim objection set forth in paragraph 1 of the office action mailed Sep. 22, 2004 is withdrawn in view of applicant's amendment and the remarks contained therein.

The previous claim rejection under 35 USC 112, first paragraph, set forth in paragraph 2 of the office action mailed Sep. 22, 2004 is withdrawn in view of applicant's amendment and the remarks contained therein.

The previous obviousness-type double patenting set forth in paragraph 5 of the office action mailed Sep. 22, 2004 is withdrawn in view of the terminal disclaimer received March 25, 2005.

However, applicant's arguments traversing (1) the previous claim rejection under 35 USC 103(a), set forth in paragraph 3 of the office action mailed Sep. 22, 2004 and (2) the previous obviousness-type double patenting rejection, set forth in paragraph 4 of the office action mailed Sep. 22, 2004, have been considered but are not found to be persuasive.

Said rejections are maintained essentially for the reasons given previously in the office action mailed Sep. 22, 2004 with the following additional comment:

***Claim Rejection(s) under 35 USC 103 over Arbuthnot et al., 6,458,811:***

Applicant argues,

"At the time the inventions of the pending claims were made, the inventors were under an obligation to assign the inventions to Eli Lilly and Company (Lily). Also at the time of making the invention claimed in this application, the inventors responsible for the subject matter disclosed and claimed in the cited '811 patent were under an obligation to assign said inventions to Lily. The subject matter of the '811 patent was assigned to Lily as reflected in assignment documents recorded at reel 013181, frame 0709. The subject matter of the present case was also assigned to Lily as reflected in assignment documents recorded at reel 010383, frame 0447. Both cases remain owned by Lily. The assignment documents related to priority application no. PCT/US97/19 were forwarded to the USPTO for recordation on March 5, 1999."

Said arguments have been considered but are not found to be persuasive.

Said arguments and proof of ownership/assignment have been considered but are not, without additional evidence, found to be persuasive.

In order to exclude a 102(e) reference under 35 USC 103(c), Applicant must submit a statement, for example, **that the application and the reference, i.e.**

**Arbuthnot et al., 6,458,811, were at the time the invention was made, owned by or subject to an obligation of assignment to, the same person.** Assignment records, by themselves (without the required statement by applicant) are not sufficient evidence since assignment records do not show the required "at the time the invention was made."

Therefore, the rejection is respectfully maintained.

***Obviousness-type double patenting rejection over USPN 6,458,811:***

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Applicant contends that examiner has not established a prima facie case and has not sufficiently shifted the burden to applicant's to rebut the rejection. The mere fact that a prior disclosure encompasses a new claim does not always, without further reasoning, lead to a prima facie case of obviousness. See, e.g., *In re Baird*, 16 F.3d 380, 29 USPQ2d 1550 (Fed. Cir. 1994).

Said arguments have been considered but are not found to be persuasive.

The examiner respectfully submits that further reasoning was provided in the office action mailed Sep. 22, 2004. As stated in the office action mailed Sep. 22, 2004, it would have been obvious to modify the claims of the instant application to reduce the likelihood or occurrence of breast cancer in a post-menopausal woman because one of ordinary skill in the art would reasonably expect raloxifene to be effective in reducing the occurrence of breast cancer in a post-menopausal women. That is to say that one of ordinary skill in the art would reasonably expect raloxifene to demonstrate anti-breast cancer activity in post-menopausal women.

The rejection is respectfully maintained.

***New Ground(s) of Rejection***

Applicant's amendment necessitated the following new ground of rejection.

***Claim Rejection(s)—35 USC 112***

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

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1. Claims 147-148, 151-152 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. The factors to be considered in determining whether a disclosure meets the enablement requirement of 35 USC 112, first paragraph, have been described in In re Wands, 8 USPQ2d 1400 (Fed. Cir. 1988). Among the factors are: (1) the nature of the invention; (2) the state of the prior art; (3) the relative skill of those in the art; (4) the predictability or unpredictability of the art; (5) the breadth of the claimed; (6) the amount of direction or guidance presented; (7) the presence or absence of working examples; and (8) the quantity of experimentation necessary. When the above factors are weighed, it is the examiner's position that one skilled in the art could not practice the invention without undue experimentation.

**(1) The nature of the invention**

The claims are drawn to a method for reducing the likelihood of incurring or developing estrogen-dependent breast cancer in a post-menopausal woman diagnosed as being in need of such therapy by orally administering to the post-menopausal woman an effective amount (about 60 mg) of the compound represented by the formula (chemical name: raloxifene). More specifically, dependent claims 147-148 and 151-152 further limit the method of claim 145 by stating that the incurrence or development of breast cancer is *de novo*, defined by applicant as "being associated with primary prevention" (please see page 10, line 23 to page 11, line 5).

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**(2) The state of the prior art**

The art recognizes the treatment of various cancers such as breast cancer. However, complete "prevention" has yet to be recognized. For example, McGuire et al. (already of record) disclose that by the time breast cancer is diagnosed, the cancer has often already spread to the lymph nodes and that the only therapeutic approach involves treatment of the breast cancer whether it is primary or advanced. Please see page 1348, first and second full paragraph under the section Treatment of Primary Breast Cancer and page 1352, first full paragraph under Treatment of Advanced Breast Cancer.

**(3) The relative skill of those in the art**

The relative skill of those in the art is high. However, given the state of the art as set forth above, the artisan is currently unaware of any one particular anticancer agent that is effective in preventing breast cancer.

**(4) The predictability or unpredictability of the art**

The unpredictability of the pharmaceutical and chemical art is high. Additionally, the lack of significant guidance from the present specification or prior art with regard to the actual prevention of breast cancer in a human, with the claimed compound as the active ingredient makes practicing the claimed method unpredictable.

**(5) The breadth of the claims**

The claims are only drawn to the primary prevention (*de novo*) of breast cancer in post-menopausal females. Applicant's specification states at page 11, lines 1-5, "a person who is at no particular risk of developing breast cancer is one who may develop

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*de novo* breast cancer, has no evidence or suspicion of the potential of the disease above normal risk, and who has never had a diagnosis of having the disease.”

**(6) The amount of direction or guidance presented**

The claims requires the “primary prevention” of breast cancer in post-menopausal women, that is to say, a method of thwarting or warding off breast cancer in post-menopausal women. However, Applicant’s specification provides no guidance to enable one of ordinary skill in the art to practice the claimed method. Instead there appears to be guidance on reducing the likelihood of breast cancer in post-menopausal women who are at risk for breast cancer, i.e. a woman with a personal history of breast cancer (a breast cancer survivor) or a post-menopausal woman who has a family history of the disease (please see page 11, lines 5-12, page 20 etc).

Moreover, the specification does not provide guidance as to how one of ordinary skill in the art would accomplish the objective of preventing breast cancer in a post-menopausal woman or how a post-menopausal woman could be kept from even being susceptible to cancer. Nor is there any guidance provided as to a specific protocol to be utilized in order to show the efficacy of the presently claimed active agent for primary prevention of breast cancer.

**(7) The presence or absence of working examples**

The specification describes a “test procedure”, starting at page 20, involving post-menopausal women with established osteoporosis. Results from the test procedure demonstrate a decreased incidence of breast cancer rather than complete “prevention.”



**(8) The quantity of experimentation necessary**

Since (1) the current therapeutic approach in the art is to the treatment and not the prevention of breast cancer and (2) the specification lacks guidance or working examples demonstrating the primary prevention of breast cancer in a post-menopausal woman, one of ordinary skill in the art would be burdened with undue experimentation to completely prevent or ward off breast cancer in any post-menopausal woman.

Additionally, it is highly unlikely, and the Office would require experimental evidence to support the contention, that the claimed active agent, raloxifene, could actually prevent breast cancer, by simply orally administering an amount of the claimed active agent. The specification fails to enable one of ordinary skill in the art to practice the prevention of cancer.

Finally, the term "prevention" is synonymous with the term "curing" and both circumscribe methods of absolute success. Since absolute success is not reasonably possible with most diseases/disorders, especially those having etiologies and pathophysiological manifestations as complex/poorly understood as breast cancer, the specification, which lacks an objective showing that breast cancer can actually be prevented or cured, is viewed as lacking an adequate written description of the same.

***Conclusion***

Claims 19, 145-152 are rejected.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

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§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

CDM



July 22, 2005



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